

## ABSTRACT

Storage library systems and methods of operating and assembling library systems are provided. The storage library system may include a stationary support member having a first axis and a cartridge transport assembly. The cartridge transport assembly includes a cartridge retrieving mechanism configured to retrieve a removable media cartridge, said cartridge transport assembly being coupled to the support member, wherein the cartridge retrieving mechanism is positionable in four degrees of freedom. The method of operating a tape library may include transmitting instruction signals to a robotics controller disposed on a cartridge transport assembly, translating the cartridge transport assembly along a stationary support member, and positioning the cartridge retrieving mechanism in four degrees of freedom relative to the stationary support member.